

MCM 9 powers SG 3 to start Engine 1, powers TM 5 to drive the wheels, and controls TM 5 to brake the wheels and regenerate electricity.

Claims:

Claim 1, has been amended as follows:

1. (amended)A hybrid electric vehicle comprising:
 - an internal combustion engine;
 - an alternator for starting said engine and for generating poly-phase alternating current, said alternator being mounted to an engine shaft;
 - a direction switch for swapping two of three power lines of said alternator;
 - a motor for providing driving and braking torque to the wheels of the vehicle, said motor being a multi-speed poly-phase induction motor and having a speed switch for changing pole-pair number of said motor, said motor being electrically connected to said alternator through said speed switch and said direction switch;
 - a clutch for connecting said engine shaft to a motor shaft and allowing said engine to drive the wheels directly;
 - a battery; and
 - a motor control module being connected to electric power lines of said alternator and said motor, said control module inverting direct current from said battery into poly-phase alternating current with variable frequency, said control module converting alternating current from said alternator and said motor into direct current.

REMARKS

Claim 1 has been amended to correct those formality errors noted by the Examiner.

Claim 1 and two paragraphs of the specification have been amended in order to remove an unnecessary limitation. The limitation is that the Motor Control Module (MCM) would control the electric switches. This limitation is unnecessary to this invention because the switches control